

RESIDENT WORK AT THE ROYAL NORTH SHORE HOSPITAL

A.—EMERGENCY PLASTER CASTS

by

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The emergency twenty-four hour service provided by the Physiotherapy Department at the Royal North Shore Hospital is chiefly concerned with Chest Management and Plaster of Paris application to fractures.

The seven Junior Resident physiotherapists rostered for this work are required to take a great deal of responsibility. Whilst they are new graduates their lack of experience is balanced by their enthusiasm and youthful endurance to cope with long hours on duty. From the therapists viewpoint, this twelve-month appointment gives them experience that is an invaluable foundation for their future careers.

To prepare them for the routines that are particular to our Hospital, we request that they attend the Department for two days prior to commencing duty. In this time lectures are given by Senior physiotherapists from the various specialty units such as thoracic, spinal injuries, obstetric, orthopaedic, emergency wards and plaster room, particular emphasis being given to the needs that may arise in these sections at nights and weekends.

Instruction is also given during this preliminary period and in the first weeks of duty in certain procedures for emergency plaster application.

There are five variations used by the orthopaedic surgeons in immobilizing a Colles fracture but one method is used routinely by the junior therapists. This is a cast consisting of two slabs of plaster applied over padding of orthopaedic wool, bound together with 2" gauze bandage and secured with Z.O. strapping. (See Figures 1 and 2.)

It is essential in gaining full advantage of this method that:

- (a) A space of $\frac{3}{8}$ " be left between the two slabs.
- (b) That the plaster is carefully moulded around the three points of leverage.
- (c) The plaster must be well moulded to maintain the curve at the lower end of the radius.

In the event of swelling, the gauze bandage can then be cut between the two slabs, and rebound without risk of displacement to the reduction. After two or three days, when all swelling has subsided, the plaster can be tightened by bandaging over the cast and securing firmly with strapping.

Another form of splintage frequently used is an anti-rotation shoulder shell to immobilize an impacted fracture of the neck of humerus. (See Figures 3 and 4.)

The method as outlined for Junior Residents is:

Position

Conscious patient: Sitting sideways on chair, with unaffected side to back of chair, leaving fractured side free to access as far as scapula.

Anaesthetized patient: Lying with fractured side as close as possible to side of bed.

Materials

1. Two pieces of white felt approximately 12" x 7" and 3" x 8".
2. Collar and cuff.
3. Z.O. strapping.
4. Roll of brown orthopaedic wool, about 4 thicknesses.



FIGURE 1

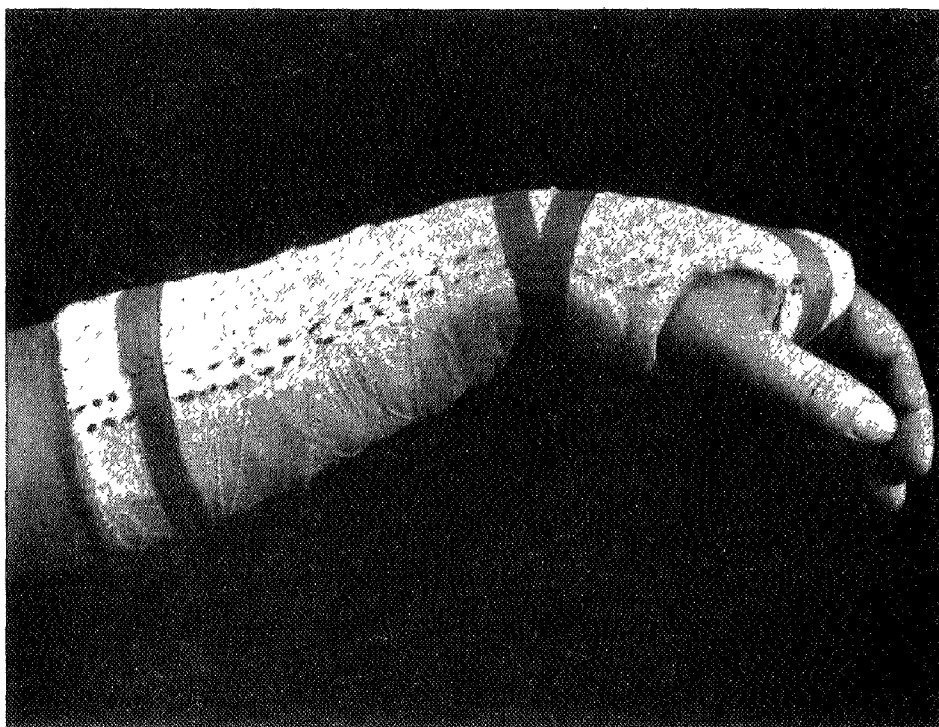


FIGURE 2

5. One or two 6" Plaster of Paris bandages.
One 4" or 6" Gypsona bandage.
6. Two 4" flannelette bandages.
7. One 3" gauze bandage.
8. Compound Tincture of Benzoin.
9. Elastoplast.

point of the elbow). This bandage should cover three-quarters of upper arm surface, as far as possible to the front and back of humerus. Secure by applying wet 3" gauze bandage around the arm.

Mould well: Place two flannelette bandages one above the other over the mould

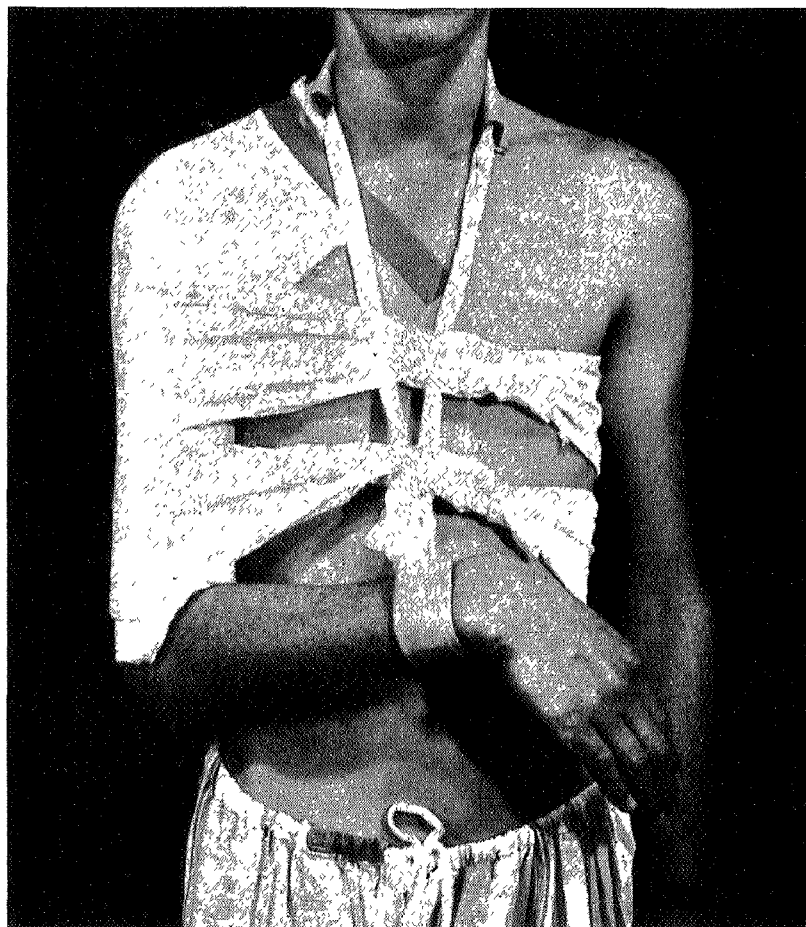


FIGURE 3

To Apply

1. Apply collar and cuff.
2. The larger piece of felt is placed across the shoulder to cover bony points up to curve of the neck.

The smaller piece of felt is used to cover the medial and lateral epicondyles. Hold both in place with Z.O. strapping.

Soak 6" Plaster of Paris bandage and mould to arm, commencing at the base of neck down to the olecranon (not covering the

and fix in position with five thicknesses of Gypsona. Insert the roll of wool under the axilla. Paint the remaining shoulder surface with Compound Tincture of Benzoin and apply Elastoplast from the midline of the sternum over the shoulder and down to cover the scapula area. Two strips are usually adequate to prevent the mould "riding up" in bed. Secure the two flannelette bandages firmly with reef knots tied at front of chest, and clean up and trim felt as necessary.

The patient is instructed to exercise the fingers and wrist in the collar and cuff, and given the usual instructions for patients in plaster.

This method gives immediate relief of pain by giving more support and stability at the fracture site than a side binder.

The emphasis in these emergency plasters is to provide adequate and safe immobili-

zation, with minimum scope for error. For this reason most casts are padded with orthopaedic wool.

We find that with the constant demands of the emergency area requiring frequent calls on the therapists, together with correction and supervision by senior staff during the day, very early in the year we have a competent team of physiotherapists able to provide a highly satisfactory service.

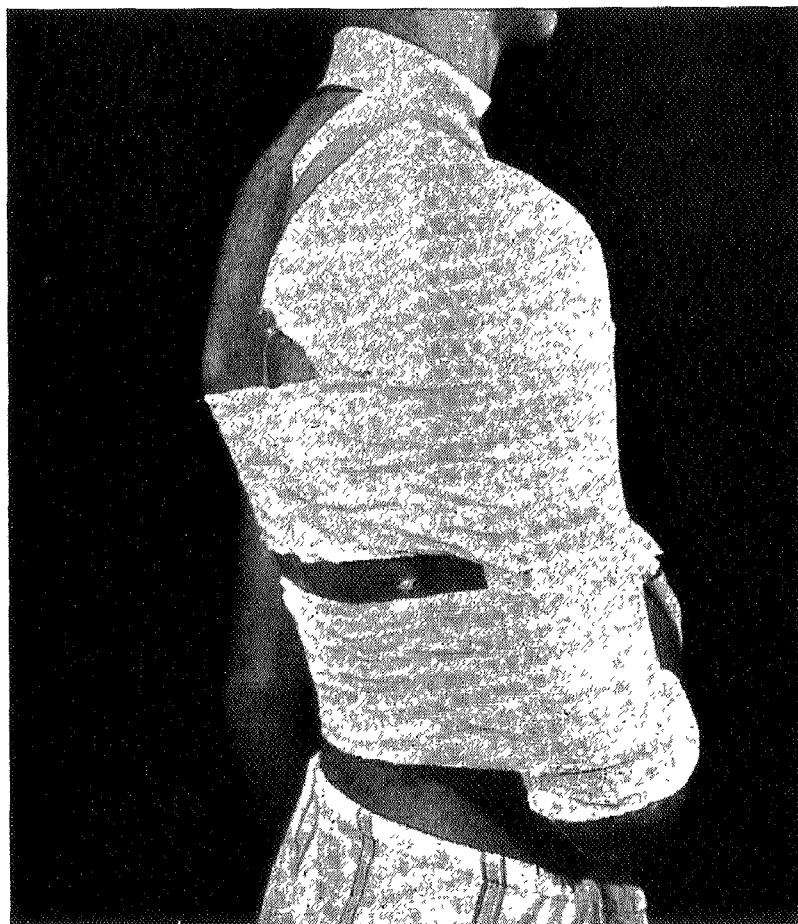


FIGURE 4